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Certificate of Analysis

Project Name: **Routine Sample Submission**

Workorder: **9805830**

Purchase Order: **Credit Card**

Workorder ID: **Oil Analysis (08/26/09)**

Mr. Sean E Cramer
Spectra Energy
2601 Market Place
Suite 400
Harrisburg, PA 17110

September 8, 2009

Dear Mr. Cramer,

Enclosed are the analytical results for samples received by the laboratory on Wednesday, August 26, 2009

ALSI is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Baer (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.


Anna G Milliken
Laboratory Manager



SAMPLE SUMMARY

Workorder: 9805830 Oil Analysis (08/26/09)

Discard Date: 09/22/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9805830001	Used Material	Other	8/26/09 11:00	8/26/09 15:45	Sean Cramer
9805830002	Reference	Other	8/26/09 11:00	8/26/09 15:45	Sean Cramer

Workorder Comments:

This report was modified to include the chromatogram attachment. SJB 08/27/09

Notes

- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

**ANALYTICAL RESULTS**

Workorder: 9805830 Oil Analysis (08/26/09)

Lab ID: **9805830001**

Date Collected: 8/26/2009 11:00

Matrix: Other

Sample ID: **Used Material**

Date Received: 8/26/2009 15:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	971000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Acetonitrile	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
				0						
Acrolein	ND		ug/kg	243000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
				0						
Acrylonitrile	ND		ug/kg	485000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
tert-Amyl methyl ether	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
tert-Amyl Alcohol	ND		ug/kg	485000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
tert-Amyl Ethylether	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Benzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Benzyl Chloride	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Bromobenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Bromochloromethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Bromodichloromethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Bromoform	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Bromomethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
2-Butanone	ND		ug/kg	971000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
tert- Butyl Alcohol	ND		ug/kg	971000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
n-Butylbenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
tert-Butylbenzene	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
sec-Butylbenzene	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Carbon Disulfide	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Carbon Tetrachloride	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Chlorobenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Chlorodibromomethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Chloroethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
2-Chloroethylvinyl ether	ND		ug/kg	291000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Chloroform	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1-Chlorohexane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Chloromethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Chloroprene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
3-Chloro-1-propene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
o-Chlorotoluene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
p-Chlorotoluene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Cyclohexane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2-Dibromo-3-chloropropane	ND		ug/kg	680000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2-Dibromoethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Dibromomethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
trans-1,4-Dichloro-2-butene	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2-Dichlorobenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,3-Dichlorobenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,4-Dichlorobenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Dichlorodifluoromethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,1-Dichloroethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2-Dichloroethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,1-Dichloroethene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A

**ANALYTICAL RESULTS**

Workorder: 9805830 Oil Analysis (08/26/09)

Lab ID: **9805830001**

Date Collected: 8/26/2009 11:00

Matrix: Other

Sample ID: **Used Material**

Date Received: 8/26/2009 15:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethene, Total	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
cis-1,2-Dichloroethene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
trans-1,2-Dichloroethene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Dichlorofluoromethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,3-Dichloropropane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
2,2-Dichloropropane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2-Dichloropropane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,1-Dichloropropene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
cis-1,3-Dichloropropene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
trans-1,3-Dichloropropene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,3-Dichloropropene, Total	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Diisobutylene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Diisopropyl ether	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,4-Dioxane	ND		ug/kg	311000 00	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Ethyl Ether	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Ethyl Methacrylate	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Ethyl Acetate	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Ethyl tert-butyl ether	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Ethylbenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Freon 113	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Heptane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Hexachlorobutadiene	ND		ug/kg	485000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Hexachloroethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Hexane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
2-Hexanone	ND		ug/kg	485000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Iodomethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Isobutyl alcohol	ND		ug/kg	728000 0	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Isopropyl Alcohol	ND		ug/kg	243000 0	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Isopropylbenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
p-Isopropyltoluene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Methacrylonitrile	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Methyl methacrylate	ND		ug/kg	291000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Methyl acetate	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Methyl cyclohexane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Methyl t-Butyl Ether	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	485000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Methylene Chloride	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Naphthalene	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Nitrobenzene	ND		ug/kg	971000 0	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
2-Nitropropane	ND		ug/kg	485000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Octane	ND		ug/kg	291000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Pentane	ND	1	ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
n-Propanol	ND		ug/kg	583000 00	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A



ANALYTICAL RESULTS

Workorder: 9805830 Oil Analysis (08/26/09)

Lab ID: **9805830001**

Date Collected: 8/26/2009 11:00

Matrix: Other

Sample ID: **Used Material**

Date Received: 8/26/2009 15:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Propionitrile	ND		ug/kg	971000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
n-Propylbenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Styrene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,1,1,2-Tetrachloroethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,1,2,2-Tetrachloroethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Tetrachloroethene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Tetrahydrofuran	ND		ug/kg	485000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Toluene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Total Xylenes	ND		ug/kg	291000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2,3-Trichlorobenzene	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2,4-Trichlorobenzene	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,1,1-Trichloroethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,1,2-Trichloroethane	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Trichloroethene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Trichlorofluoromethane	ND	2	ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2,3-Trichloropropane	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,2,4-Trimethylbenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
1,3,5-Trimethylbenzene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Vinyl Acetate	ND		ug/kg	485000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Vinyl Chloride	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
o-Xylene	ND		ug/kg	97100	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
mp-Xylene	ND		ug/kg	194000	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	94.6		%	71-146	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
4-Bromofluorobenzene (S)	85.1		%	46-138	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Dibromofluoromethane (S)	94.7		%	42-143	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A
Toluene-d8 (S)	93.5		%	54-141	8260/5035	8/28/09	DJB	8/29/09 03:42	DD	A

SEMIVOLATILES

Acenaphthene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Acenaphthylene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Anthracene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Benzo(a)anthracene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Benzo(a)pyrene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Benzo(b)fluoranthene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Benzo(g,h,i)perylene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Benzo(k)fluoranthene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
4-Bromophenyl-phenylether	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Butylbenzylphthalate	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Carbazole	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
4-Chloro-3-methylphenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
4-Chloroaniline	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Bis(2-Chloroethoxy)methane	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Bis(2-Chloroethyl)ether	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
bis(2-Chloroisopropyl)ether	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2-Chloronaphthalene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2

**ANALYTICAL RESULTS**

Workorder: 9805830 Oil Analysis (08/26/09)

Lab ID: **9805830001**

Date Collected: 8/26/2009 11:00

Matrix: Other

Sample ID: **Used Material**

Date Received: 8/26/2009 15:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
2-Chlorophenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
4-Chlorophenyl-phenylether	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Chrysene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
mp-Cresol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
o-Cresol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Di-n-Butylphthalate	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Di-n-Octylphthalate	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Dibenzo(a,h)anthracene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Dibenzofuran	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
1,2-Dichlorobenzene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
1,3-Dichlorobenzene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
1,4-Dichlorobenzene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
3,3-Dichlorobenzidine	ND		ug/kg	165000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
				0						
2,4-Dichlorophenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Diethylphthalate	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2,4-Dimethylphenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Dimethylphthalate	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2,4-Dinitrophenol	ND		ug/kg	156000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
				0						
2,4-Dinitrotoluene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2,6-Dinitrotoluene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
bis(2-Ethylhexyl)phthalate	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Fluoranthene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Fluorene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Hexachlorobenzene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Hexachlorobutadiene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Hexachlorocyclopentadiene	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Hexachloroethane	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Indeno(1,2,3-cd)pyrene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Isophorone	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2-Methyl-4,6-dinitrophenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2-Methylnaphthalene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Naphthalene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2-Nitroaniline	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
3-Nitroaniline	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
4-Nitroaniline	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Nitrobenzene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2-Nitrophenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
4-Nitrophenol	ND		ug/kg	156000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
				0						
N-Nitroso-di-n-propylamine	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
N-Nitrosodiphenylamine	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Pentachlorophenol	ND		ug/kg	156000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
				0						
Phenanthrene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Phenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Pyrene	ND		ug/kg	202000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2



ANALYTICAL RESULTS

Workorder: 9805830 Oil Analysis (08/26/09)

Lab ID: **9805830001**

Date Collected: 8/26/2009 11:00

Matrix: Other

Sample ID: **Used Material**

Date Received: 8/26/2009 15:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,2,4-Trichlorobenzene	ND		ug/kg	289000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2,4,5-Trichlorophenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2,4,6-Trichlorophenol	ND		ug/kg	780000	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
2,4,6-Tribromophenol (S)	77.7		%	50-150	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2-Fluorobiphenyl (S)	83.4		%	50-150	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Phenol-d5 (S)	61		%	50-150	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Terphenyl-d14 (S)	95.7		%	50-150	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
Nitrobenzene-d5 (S)	54.2		%	50-150	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2
2-Fluorophenol (S)	90.6		%	50-150	SW846 8270D	9/2/09	MPP	9/7/09 23:06	DHF	A2

PETROLEUM HC's

Total Petroleum HC's C8-C40	See comment	SW846 8015D	8/26/09 21:37	KJH	A
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PCBs

Aroclor-1016	ND		mg/kg	0.98	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1
Aroclor-1221	ND		mg/kg	0.98	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1
Aroclor-1232	ND		mg/kg	0.98	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1
Aroclor-1242	ND		mg/kg	0.98	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1
Aroclor-1248	ND		mg/kg	0.98	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1
Aroclor-1254	ND		mg/kg	0.98	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1
Aroclor-1260	ND		mg/kg	0.98	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
Decachlorobiphenyl (S)	91.6		%	63-138	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1
Tetrachloro-m-xylene (S)	115		%	56-142	600/4-81-045	8/26/09	CJW	8/26/09 19:15	KJH	A1

Sample Comments:

The chromatographic fingerprint of this sample eluted after nC-24. This range is typical of various motor and lubricating oils as well as asphalt and waxes. When compared to the client submitted reference sample (REFERENCE) two points were observed. First, only one chromatographic pattern was present in the sample, where two distinct patterns were observed in the reference sample. Additionally, the pattern observed in the sample eluted in a similar alkane and retention time range as the first pattern of the reference sample. The overall shape of this pattern also was similar to the reference sample, however several differences were observed. This sample chromatogram as well as the reference chromatogram is enclosed for review.

This sample was collected in a soil jar for the volatile analysis. The sample was prepared by Method 5035 after the 48-hour holding time.


Anna G Milliken
Laboratory Manager



ANALYTICAL RESULTS

Workorder: 9805830 Oil Analysis (08/26/09)

Lab ID: **9805830002**

Date Collected: 8/26/2009 11:00

Matrix: Other

Sample ID: **Reference**

Date Received: 8/26/2009 15:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's										
Total Petroleum HC's C8-C40	See comment				SW846 8015D			8/26/09 20:45	KJH	A

Sample Comments:

This sample is a client submitted reference sample identified as "Reference". There were two patterns observed in this chromatogram that eluted between nC-24 and nC-40. This reference sample will be compared to client sample identified as "Used Material" (ALSI# 9805830001). Please refer to the comment associated with that sample for the comparison to this reference sample.

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager



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ANALYTICAL RESULTS QUALIFIERS/FLAGS

Workorder: 9805830 Oil Analysis (08/26/09)

PARAMETER QUALIFIERS/FLAGS

- [1] The QC sample type LCS for method 8260/5035 was outside the control limits for the analyte Pentane. The % Recovery was reported as 22 and the control limits were 26 to 159.
- [2] The QC sample type LCS for method 8260/5035 was outside the control limits for the analyte Trichlorofluoromethane. The % Recovery was reported as 26.9 and the control limits were 27 to 121.



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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE
CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier: _____
Tracking #: _____



34 Dogwood Lane - Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

Analytical
Laboratory Services, Inc.
Environmental • Industrial Hygiene • Field Services

Co. Name: Spectra Energy		Phone: (717) 540-8342		Fax: 717-944-1430	
Contact (Report to):		Address: 2601 Market Place Suite 400		City: HHS PA 17110	
Bill to (if different than Report to):		PO#: _____		Date Required: 24 hours	
Project Name/ID: _____		ALSIS Quote #: _____		Approved By: SJB	
TAT: ☒ Normal-Standard TAT is 10-12 business days.		Rush-Subject to ALSIS approval and surcharges.		Email? ☒ Y ☐ N	
Sample Description/Location (see 3 will appear on the lab report)		COC Comments		Sample Date	
1 Used Material				8/2/19 1100	
2 Reference				8/2/19 1100	
3					
4					
5					
6					
7					
8					
9					
10					
SAMPLER BY (Please Print): SEAN E CRANER		LOGGED BY (Signature): [Signature]		Date: 8/2/19	
Relinquished By / Company Name: [Signature]		Received By / Company Name: [Signature]		Date: 8/2/19	
3		8/2/19 3:45pm		4	
5				6	
7				8	
9				10	
ANALYSES/METHOD REQUESTED		Enter Number of Containers Per Analysis		Data Deliverables	
PCB		6 0 1		Standard ☐ QLP-like ☐ NJ-Reduced ☐ NJ-Full ☐	
CE Fingerprint		6 0 1		SWA Form 135 ☐ yes ☐ no ☐ Other ☐	
Correct sample volume? ☒ Y ☐ N		Correct sample volume? ☒ Y ☐ N		State Sampler Collected in? ☐ MD ☐ NJ ☐ NY ☐ PA	
Correct container? ☒ Y ☐ N		Correct container? ☒ Y ☐ N		Data Deliverables ☐ yes ☐ no ☐ Other ☐	
Headspace/Volatiles? ☒ Y ☐ N		Headspace/Volatiles? ☒ Y ☐ N		EPA 821-1 ☐ yes ☐ no ☐ Other ☐	
Container in good condition? ☒ Y ☐ N		Container in good condition? ☒ Y ☐ N		DOO Criteria Required? ☐ yes ☐ no ☐ Other ☐	
COC Labels complete/accurate? ☒ Y ☐ N		COC Labels complete/accurate? ☒ Y ☐ N		ALSIS FIELD SERVICES	
Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment ☐ Other ☐					

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY
* G-Grab; Co-Composite
**Matrix: At-Air; DW=Drinking Water; GW=Groundwater; Q=Oil; O=Other Liquid; St=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass; PL-Plastic; Container Size: 250ml, 500ml, 1L, 5L, etc. Preservative: HCl, HNO3, NaOH, etc.



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Page 4

Data File: \\Cc01\\TargetData\\Chem\\gc11.i\\11090825.b\\ahpm042.d

Date : 26-AUG-2009 21:37

Client ID: Used Material

Sample Info: 9805830001

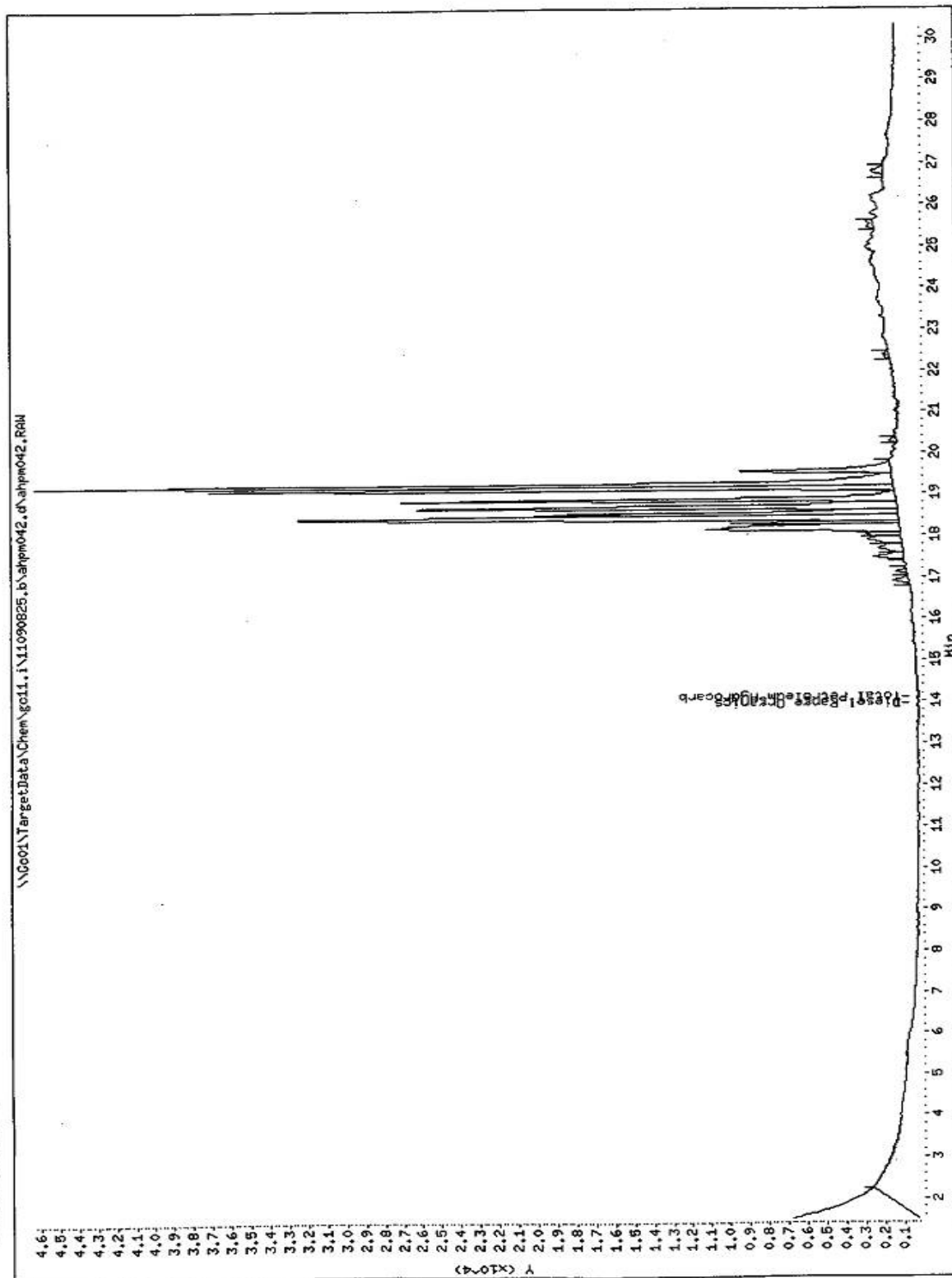
Volume Injected (μL): 2.0

Column phase: ZB-5

Instrument: g011.i

Operator: KJH

Column diameter: 0.53





Page 4

Data File: \\Go01\\TargetData\\Chem\\gc11.1\\11090825.b\\ahpm041.d
Date: 26-AUG-2009 20:45
Client ID: Reference
Sample Info: 9805830002
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: gc11.i
Operator: KJH
Column diameter: 0.53

